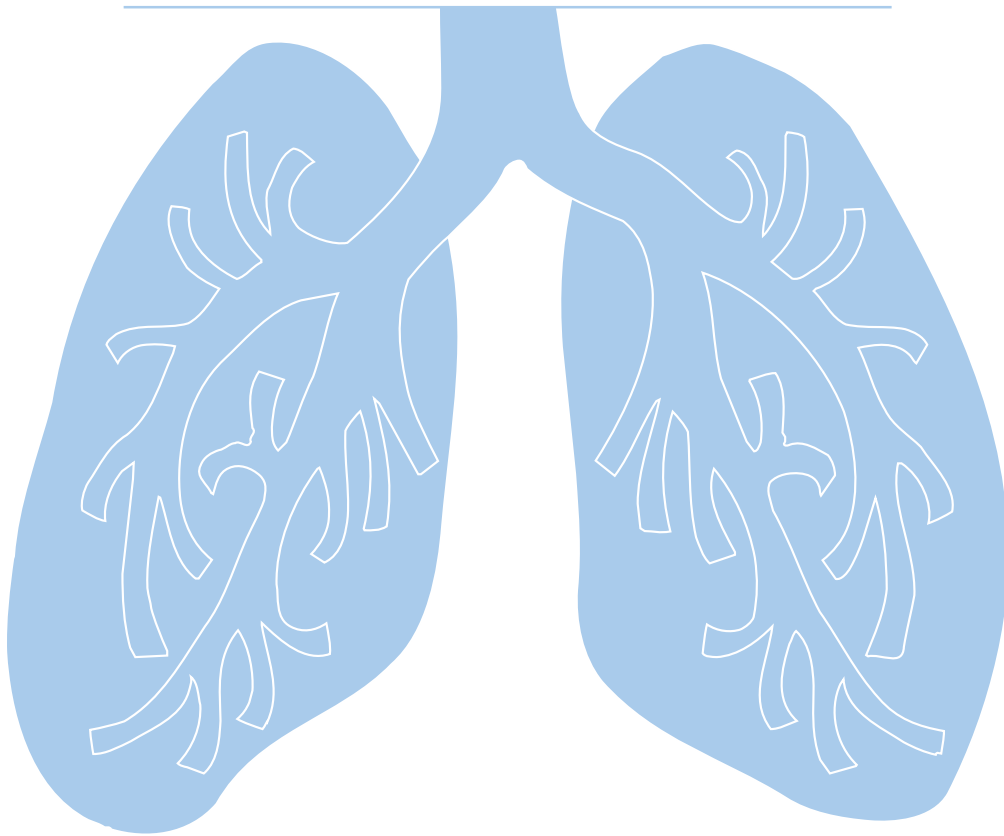


Component 4

Patient Education



To take medications correctly, children with asthma (and their families and caregivers) need education.

Education is time-consuming, but will improve adherence with therapy.

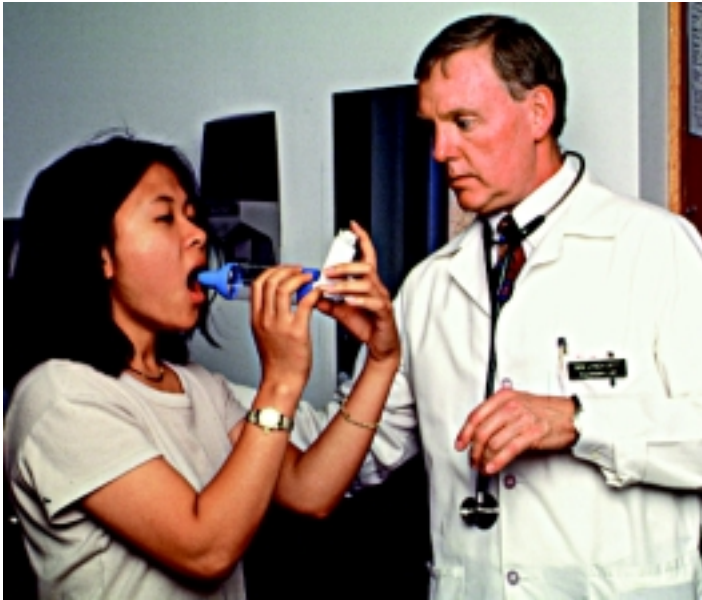
Managing the Child with Asthma: Component 4 – Patient Education

Take a proactive approach to asthma education. Form a partnership with the patient and family.

- Provide sufficient information to the child with asthma and to ALL relevant caregivers (parents, older children, daycare providers, teachers, coaches, scout leaders, camp counselors, school and camp nurses).
- Education should begin at the time of diagnosis and be integrated into every step of clinical care.
 - ⇒ Introduce key educational messages at each clinic visit. See page 108 for suggested messages and how to fit them into clinic visits.
 - ⇒ Teach asthma management skills to the whole family.
 - ⇒ Tailor the educational approach to the needs of the child and the family.
 - ⇒ Be sensitive to cultural beliefs and practices.
- Adopt a team approach to patient education.
 - ⇒ All health care team members and office staff should reinforce the educational messages.
 - ⇒ Use outside resources such as respiratory therapists, health educators, pharmacists, and patient organizations. See Resource List, page 121.
- Regularly teach and review:
 - ⇒ Basic asthma facts.
 - ⇒ Roles of medications.
 - ⇒ Device and monitoring skills.
 - ⇒ Environmental control measures.
 - ⇒ When and how to take rescue actions.
- Provide written actions plans for managing exacerbations to:
 - ⇒ The child.
 - ⇒ The family.
 - ⇒ The child's school.
 - ⇒ The child's caregivers, including daycare providers.

What can you and your staff do in a single asthma visit?

- Document the child's and parents' concerns.
- Review the child's medications: How often are you using your long-term control medicine? ... your quick-relief medicine?
- Review self-management skills: Show me how you use your inhaler? ... your peak flow meter?
- Repeat the important messages: Asthma can be controlled. Our goal is for you to participate in whatever activities you'd like.
- Help with problem solving: What makes it easier for you to remember to take your medications? How do you avoid triggers?



Remember:

Patients need an asthma management plan that includes daily management and an action plan for handling exacerbations. See sample Asthma Management Plan, page 104.

Sample Asthma Management Plan for Long-Term Control and for Treating Asthma Exacerbations

GREEN ZONE: Doing well

- No cough, wheeze, chest tightness or shortness of breath during the day or night
- Can do usual activities

And, if a peak-flow meter is used,

Peak flow: more than _____
(80% or more of my best peak flow)

My best peak flow is: _____

Take these long-term control medicines each day (include anti-inflammatory):

Medicine	How much to take	When to take it

Before exercise ☐ _____ ☐ 2 or ☐ 4 puffs 5 to 30 minutes before exercise

YELLOW ZONE:

Asthma is getting worse

- Cough, wheeze, chest tightness or shortness of breath, OR
- Waking at night due to asthma, or
- Can do some, but not all, usual activities

OR

Peak flow: _____ to _____
(50%-80% of my best peak flow)

FIRST

Add Quick-Relief medicine – and keep taking your GREEN ZONE medicine:

_____ (short-acting beta₂-agonist)

SECOND

If your symptoms (and peak flow, if used) **return to GREEN ZONE** after 1 hour of above treatment:

- ☐ Take the quick-relief medicine every 4 hours for 1 to 2 days.
- ☐ Double the dose of your inhaled corticosteroid for _____ (7-10) days.

If your symptoms (and peak flow, if used) **do not return to GREEN ZONE** after 1 hour of above treatment:

- ☐ Take: _____ ☐ 2 or ☐ 4 puffs or ☐ Nebulizer
(short-acting beta₂-agonist)
- ☐ Add: _____ mg, per day for _____ (3-10) days.
(oral corticosteroid)
- ☐ Call the doctor ☐ before ☐ within _____ hours after taking the oral corticosteroid.

RED ZONE: Medic Alert!

- Very short breath, OR
- Quick-relief medicines have not helped, or
- Cannot do usual activities, or
- Symptoms are same or get worse after 24 hours in Yellow Zone

OR

Peak flow: _____ to _____
(< 50% of my best peak flow)

Take this medicine:

- ☐ _____ ☐ 2 or ☐ 4 puffs or ☐ Nebulizer
(short-acting beta₂-agonist)
- ☐ _____ mg.
(oral corticosteroid)

Then call your doctor **NOW**. Go to the hospital or call for an ambulance if:

- You are still in the red zone after 15 minutes AND
- You have not reached your doctor.

DANGER SIGNS.

- Trouble walking and talking due to shortness of breath
- Lips or fingernails are blue

- Take ☐ 4 or ☐ 6 puffs or ☐ Nebulizer of your quick-relief medicine **AND**
- Go to the hospital or call for an ambulance (_____) **NOW!**

Identify who needs training.

- For infants and very young children, treatment decisions are made by parents and caregivers.
 - ⇒ When there are several caregivers (e.g., an extended family), as many as possible should be involved in the education program to ensure consistent management. This is particularly challenging if a child moves between family members, such as when the child's parents are separated.
- Children as young as 2 years old can begin learning about their asthma.
 - ⇒ As children grow older they need education about what is happening and how they can work with their clinician and parents to control asthma.
 - ⇒ Adolescents should receive ALL information themselves.

Deliver the information in a way that will be easily understood and accepted.

- The information should both interest AND involve the recipient (child, parent, caregiver).
- Always repeat the information.
 - ⇒ Deliver the information in several different ways for maximal effect.
 - ⇒ Use written material for reinforcement.
- Work with the child and family to jointly develop treatment goals.
- Education is a factor to consider for consultation and possible referral. (see page 47)



Maintain a partnership with the child and family.

At each visit:

- Demonstrate, review, and evaluate correct inhaler/spacer/holding chamber technique.
- Ask the child and parents what concerns they want addressed.
- Review short-term goals agreed upon at the last visit.
- Review the daily self-management plan and the action plan.
- Continue teaching the basic educational messages for asthma.
- Give the child and/or family new educational materials for review.

Involve the child as much as possible!

- Ask how the child is managing his/her asthma at school or in daycare.
- Encourage the school-age child to teach his/her friends about asthma.
- Develop the management and action plans WITH the child.

Children of different ages learn in different ways.

Age group	Learning styles
Preschool	<ul style="list-style-type: none">• Attracted by bold, bright colors and pictures• Like to explore• Like to “play-act” with dolls• Defer to parents or caregiver(s) when confronted with something new
School-age	<ul style="list-style-type: none">• Like pictures and text (books, videos, cartoons, computers)• Like games• Respond to group learning
Preadolescent	<ul style="list-style-type: none">• Prefer interactive, “hands-on,” and skill learning• Like models
Adolescent	<ul style="list-style-type: none">• Respond best to peers and “peer-idols”• May not respond to formal education• Problem-solving may be successful• Environment should be reassuring, but not adult-dominated• May want technical information

**Take advantage of
“teachable moments.”**

Attention spans for different ages:

- Toddlers: about 2-3 minutes
- School-age children: about 10-15 minutes
- Adolescents and adults: about 20-30 minutes

Working with teenagers can be challenging. They may:

- View treatment as infringing on their independence.
- Fail to recognize the danger of poorly controlled asthma.
- Respond best to peers and to peer idols. Using known personalities who themselves have asthma and using teen support groups can be very effective.

Parents need to stay involved.

- Parents should support the teenager’s efforts toward self-management.
- Some adult oversight is necessary, particularly if symptoms persist.
- Parents should help monitor medication refills.

Encourage open communication.

- Elicit the child's and/or parents' concerns early in the visit.
 - ⇒ Reassure the child and family with specific information.
- Use simple language and clear, easy-to-follow steps for the daily management and action plans.
- Promote family involvement.
- Use the child's native language.
- Know what is socially acceptable to the child and the family.
 - ⇒ Be open to alternative therapies if they are not harmful.
- Listen actively to what the child and family have to say.
- Praise the child and family for their efforts as well as for their successes.
- Be available (e.g., weekends, early mornings).
- Avoid making patients wait.
- Return ALL phone calls.

Focus on what is doable to improve adherence with asthma therapy.

- Keep therapy simple.
 - ⇒ Limit medications.
 - ⇒ Limit doses.
 - ⇒ Meet the child's schedule.
- Establish child and family priorities.
- Write an action plan with the child and the family.
- Enlist family and peer support.

Converse interactively.

- Maintain eye contact.
- Encourage with nonverbal signs such as smiling and nodding agreement.
- Ask open-ended questions.

Be aware of cultural differences, e.g.:

- In some Latino populations, asthma is viewed as a "cold" illness, amenable to "hot" treatments. Suggest that asthma medications be taken with hot tea, hot water, or broth.
- In some Asian populations, oral medications are preferred.

Provide clear and accurate information about asthma.

- Asthma is a physical illness, not an emotional one.
- Asthma is a chronic disease, not just episodic or acute.
- Medication for asthma is NOT addictive.
- Medication for asthma remains effective with long-term use.
- Prescription medications should be used to treat asthma, not over-the-counter medicines.
- Children with asthma should see the physician on a regular basis, even when symptom-free, as well as when symptoms occur.

Some Examples of Delivery of Asthma Education by Clinicians During Patient Care Visits*

Recommendations for Initial Visit

Assessment Questions Focus on: Concerns, Goals of Therapy, Quality of Life, Expectations	Teach information in simple language	Teach and demonstrate skills
<p>“What worries you most about your asthma?”</p> <p>“What do you want to accomplish at this visit?”</p> <p>“What do you want to be able to do that you can’t do now because of your asthma?”</p> <p>“What do you expect from treatment?”</p> <p>“What medicines have you tried?”</p> <p>“What other questions do you have for me today?”</p>	<p>What is asthma? A chronic lung disease. The airways are very sensitive. They become inflamed and narrow; breathing becomes difficult.</p> <p>Two types of medicines are needed:</p> <ul style="list-style-type: none"> • Long-term control: medicines that prevent symptoms, often by reducing inflammation. • Quick-relief: short-acting bronchodilator relaxes muscles around airways. <p>Bring all medicines to every appointment.</p> <p>When to seek medical advice. Provide appropriate telephone number.</p>	<p>Inhaler and spacer/holding chamber use (see page 87) Check performance.</p> <p>Self-monitoring skills tied to action plan:</p> <ul style="list-style-type: none"> • Recognize intensity and frequency of asthma symptoms • Review the signs of deterioration and the need to reevaluate therapy: <ul style="list-style-type: none"> ⇒ Waking at night with asthma ⇒ Increased medication use ⇒ Decreased activity tolerance <p>Use of an asthma management plan. (see page 104).</p>

Recommendations for First Followup Visit (2 to 4 weeks, or sooner as needed)

<p>Ask relevant questions from previous visit and also ask:</p> <p>“What medicines are you taking?”</p> <p>“How and when are you taking them?”</p> <p>“What problems have you had using your medicines?”</p> <p>“Please show me how you use your inhaled medicines?”</p>	<p>Use of two types of medicines. Remind patient to bring all medicines and the peak flow meter to every appointment for review.</p> <p>Self-evaluation of progress in asthma control using symptoms and peak flow as a guide.</p>	<p>Use of an asthma management plan (see page 104). Review and adjust as needed.</p> <p>Peak flow monitoring (see pages 42 to 43) and daily diary recording.</p> <p>Correct inhaler and spacer/holding chamber technique.</p>
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Recommendations for Second Followup Visit

<p>Ask relevant questions from previous visits and also ask:</p> <p>“Have you noticed anything in your home, work, or school that makes your asthma worse?”</p> <p>“Describe for me how you know when to call your doctor or go to the hospital for asthma care.”</p> <p>“What questions do you have about the action plan?” “Can we make it easier?”</p> <p>“Are your medicines causing you any problems?”</p>	<p>Relevant environmental control/avoidance strategies (see page 50).</p> <ul style="list-style-type: none"> • How to identify and control home, work, or school exposures that can cause or worsen asthma. • How to avoid cigarette smoke (active and passive). <p>Review all medicines and review and interpret peak flow and symptom scores from daily diary.</p>	<p>Inhaler/spacer/holding chamber technique.</p> <p>Peak flow monitoring technique.</p> <p>Review use of action plan. Confirm that patient knows what to do if asthma gets worse.</p>
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Recommendations for All Subsequent Visits

<p>Ask relevant questions from previous visits and also ask:</p> <p>“Have you tried to control things that make your asthma worse?”</p> <p>“Please show how you use your inhaled medicines.”</p>	<p>Review and reinforce all:</p> <ul style="list-style-type: none"> • Educational messages. • Environmental control strategies at home, work, or school. • Medicines. <p>Review and interpret peak flow and symptom scores from daily diary.</p>	<p>Inhaler/spacer/holding chamber technique.</p> <p>Peak flow monitoring technique.</p> <p>Review use of action plan. Confirm that patient knows what to do if asthma gets worse. Periodically review and adjust written action plan.</p>
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*Taken from the *Practical Guide for the Diagnosis and Management of Asthma*, based on the Expert Panel Report 2: *Guidelines for the Diagnosis and Management of Asthma*.

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